TRANSACTIONS OF THE NEW YORK SURGICAL SOCIETY.

Stated Meeting, April 23, 1902.

The President, L. W. HOTCHKISS, M.D., in the Chair.

EPICYSTOTOMY FOR STONES, AND PROSTATECTOMY.

DR. F. TILDEN BROWN presented a man, fifty-six years old, who first noticed, in December, 1901, that urination was becoming quite difficult, and shortly afterwards he had an attack of complete retention. A catheter was employed to relieve him, and upon one occasion a searcher was introduced into the bladder under chloroform anæsthesia. Eight or ten days later he developed considerable fever and had several chills. His urine, which up to that time had been clear, became cloudy and foul, and his frequency increased.

When Dr. Brown first saw the patient on January 17 of the present year, he was apparently suffering from a mild degree of sepsis; his general condition was poor, and he was discouraged in regard to his state of health. There was an area of bladder dulness above the pubes, and after voluntarily passing five ounces of urine, which was ammoniacal and foul-smelling, ten ounces of residual urine were withdrawn by the catheter. After two weeks of bladder irrigation, his condition improved so much that a cystoscopic examination was undertaken. This revealed, apparently, a prostatic median lobe about the size of a pigeon's egg, and beneath it a number of smooth, bean-sized calculi. The prominence of the lateral lobes could be slightly discerned, and there was a band of mucous membrane running from the median lobe to the left lateral lobe in such a way as to make it rather difficult to decide whether he was dealing with a large pedunculated off-set

from the left lateral lobe, or a median lobe with this web-like prolongation. But the latter was claimed, and it was proved correct at operation.

After this examination a consultation was held, and the patient was offered the choice of litholapaxy followed by Bottini prostatotomy at the same sitting by one surgeon, and suprapubic lithotomy with prostatectomy by another. The latter procedure being accepted, the speaker operated on February 3, the patient being under chloroform, followed by ether anæsthesia. The bladder was opened above the pubes, and ten stones removed which were partly covered by the median lobe. Then, with the left forefinger pushed into the internal meatus and acting as a guide for the blades of scissors controlled by the right hand, the mucous membrane was cut and the left forefinger forced in the median lobe of the prostate was shelled out and removed. The two lateral lobes were then enucleated with considerable difficulty, and, as they were finally brought to the surface of the bladder, two cord-like bands which held them in place were ligated and divided. The wound in the bladder was then closed with chromicized gut, as well as the upper part of the abdominal incision. Provision for draining the perineal space was made. A perineal opening was finally made for bladder drainage.

Although the blood lost was not great, the patient showed a considerable degree of shock after the operation, which necessitated free stimulation and a saline infusion. The next day he was much better. Two days later he had a chill, and again required stimulation and a saline infusion. His pulse remained rapid and of poor quality, and his general appearance indicated a continuance of shock with a moderate sepsis. As the perineal tube began to cause vesical irritation, it was removed on the ninth day. His perineal fistula healed quite readily, so that all the gauze dressing was discontinued by the twenty-first day. The patient had been sitting up and out of bed for a week, when on the thirty-third day he complained of general soreness and malaise; this was followed by a sudden rise of temperature; the right wrist and left knee-joint became red and slightly swollen, and he was irrational and at times delirious. This febrile condition continued for four days, when the nurse noticed that the bandage covering the perineal wound was stained by a slight discharge of pus. The perineal skin had united in advance of

tissues immediately beneath, causing a small retention abscess and the somewhat alarming constitutional symptoms. Now fever ceased, the joint involvements subsided, and the patient's general condition improved, but his mental state was unsatisfactory. He slept poorly, and was more delirious than he had been, in spite of the use of various hypnotics. He was examined by several neurologists, who attributed his condition to the pre- and post-operative strain on a naturally nervous temperament, as well as a functionally bad heart. He left the hospital about three weeks ago, and since then he has improved in every way. He now sleeps and eats well, and has gained about ten or twelve pounds in weight. He voids his urine about every three hours, and his bladder retains generally one drachm of residual urine; two drachms being the most ever found. It is acid in reaction, quite clear, no trace of albumen, but still contains some purulent flakes, which probably originate in the hyperæmic patches on the bladder wall over the site of the prostatic enucleation and in the posterior urethra. A culture made from the man's urine revealed colon bacilli.

Dr. Brown said that the two cord-like prolongations which held the lateral lobes in place, and which he had ligated and divided, were undoubtedly the ejaculatory ducts, and this fact was often in mind as having a possible bearing upon the man's subsequent nervous symptoms.

In this operation the septum between the lateral lobes in which the ejaculatory ducts run had been carried away by the finger in the process of enucleation. The speaker believes that this should be carefully avoided by seeing that the enucleating finger, after insertion through a single median mucous membrane rent, is then diverted to one side for excochleation of one lobe from its capsules; and before attacking the other side the finger should be withdrawn so as to sweep across the vesical margin of the ejaculatory duct septum before attacking the opposite lobe.

FINAL RESULT OF DELORME'S OPERATION.

Dr. Otto G. T. Kiliani (compare "Total Empyem von zwanzig-monatlicher Dauer, geheilt durch Delorme's Operation," *New Yorker medicinische Monatsschrift*, March, 1900. Paper read before the German Medical Society of New York, January 8, 1900) presented a girl, twelve years old, who first came

under his observation in June, 1899, with the following history: She had an attack of pneumonia on the right side in January, 1898, followed by a pleurisy on the same side, which was aspirated the following month. The child failed to improve, and on the 1st of March, 1898, the pleural cavity was opened between the sixth and seventh ribs and a large quantity of pus evacuated.

When Dr. Kiliani first saw the patient she was much emaciated, very weak, and suffering from marked cyanosis. The right pleural cavity was filled with pus. An immediate operation was done, the seventh, eighth, and ninth ribs resected, and about two litres of foul-smelling pus evacuated. The lung on the affected side was found to be completely flattened. No tubercle bacilli were found in the discharge. The child improved rapidly after the operation, gaining fifteen pounds in weight by the following November, but, as a fistulous opening persisted and the lung failed to expand, it was decided to do the Delorme operation. The outcome of this was extremely doubtful, as the affected lung had been compressed for twenty months. The operation was done on November 9, 1899, the incision for the flap extending from the sixth rib to the tenth rib. The child made a rapid recovery, and left the hospital about two weeks after the operation.

Dr. Kiliani said he showed the case now in order to illustrate to what extent the lung had expanded. At the time of operating, it was practically a flattened mass, while now the breathing over the affected side extends over an area about ten inches long. The child is apparently enjoying excellent health, but there is a marked scoliosis, resulting from the removal of the ribs.

OSTEOMYELITIS OF THE TIBIA.

Dr. Kiliani presented a young man who was operated on twenty years ago for double genu valgum, and the wounds, as the scars show, did not heal by primary union. Last October he struck his right leg against a car. The accident resulted in some pain in the affected leg, and finally he was obliged to give up his work. When Dr. Kiliani saw him, on the 15th of March of the present year, he found all the indications of a chronic osteomyelitis of the right tibia, and, upon trephining the bone, pus was detected. An incision was then made over the affected area

and the diseased bone chiselled off. The skin-flaps were then brought over the denuded area and fastened down with carpet-tacks. The wound healed by primary union.

ATYPICAL RESECTION OF THE UPPER JAW.

DR. KILIANI presented a man who, in 1890, developed an alveolar abscess as the result of an ulcerated tooth. The abscess was opened, and the tooth finally filled. Six months later he began to suffer from pain in the left cheek. The trouble was located in the antrum, and a hole was bored through the eye-tooth for the purpose of draining the cavity. Suppuration of the antrum continued, and in 1895, in order to secure more effective drainage, the eye-tooth was extracted, and three openings were made into the antrum,—one through the roof of the mouth and two through the tooth cavity. The following year another operation was performed, and a communication established between the nose and antrum. Three years later this opening was enlarged.

When Dr. Kiliani first saw the patient, on the 15th of March of the present year, the antrum trouble had existed for twelve years. There was a more or less constant accumulation of offensive pus in the antrum, which would finally be discharged through the nose and the various openings in the roof of the mouth. The pain was so severe that the patient had to have recourse to drugs and alcohol. In order to relieve him, a radical operation was done on March 20. The right external carotid was first ligated. This procedure was found a little more difficult than usual, on account of the presence of two glands lying directly over the artery. After extirpating these, a permanent ligature was applied to the artery. Then an incision after the method of Kocher-Weber was made, the flap dissected up, and the roof of the mouth divided in a sagittal direction, starting from the second incisor tooth. The entire anterior surface of the antrum was removed, including the alveolar and nasal processes, and a part of the frontal process. The dissection was then extended along the infra-orbital margin, resecting at the same time the infra-orbital nerve, and removing about one-third of the zygomatic bone. The incision was then carried downward through the alveolar process, the last molar tooth being saved. As the cavity of the antrum was filled with pus, the operation was practically done in an infected region. About a quarter of an inch external to the infra-

orbital foramen, a bony partition was found, which was probably the result of the long-continued inflammatory process. A Röntgen-ray picture of the case, taken previous to the operation, showed apparent ossification of the antrum, owing to the presence of this bony partition.

After destroying with the thermo-cautery all the mucous membrane lining the antrum, the cavity was packed, and the skin brought together and sutured. The incision healed within five days. A few stitch abscesses developed, the result of operating in infected regions.

Since the operation, the patient has been entirely free from the neuralgic pain from which he suffered for many years. He now wears a temporary plate with a perforation, which affords drainage to the rest of the antrum. When the cavity has entirely healed, a plate with artificial teeth will be inserted. There is practically no disfigurement of the face and no impairment of the muscular control.

DR. WILLY MEYER said that cases of chronic empyema of the antrum are rarely seen by the general surgeon until the trouble has existed for a long time, and various ineffectual attempts have been made to relieve the condition. The speaker said that in his opinion the most satisfactory method of treatment is to make a wide opening through the tooth cavity, and treat the case on the dry plan. In one of his cases he was obliged to operate twice through the alveolus, and scrape away a large number of papillomatous excrescences which lined the mucous membrane of the cavity. By the dry method of treatment an absolute cure can usually be obtained in the course of three months. In extreme cases, of course, a more radical operation is necessary.

In the reports of Professor Krause's clinic in Berlin by his assistant, Dr. Halle, it was claimed lately that the best results are obtained by opening the antrum through the lower fossa of the nose, with subsequent dry treatment, and that the cavity should never be entered through the mouth. They have apparently obtained excellent results by this method.

GENERAL PERITONITIS.

DR. GEORGE EMERSON BREWER presented a girl, ten years old, who was admitted to Roosevelt Hospital on June 5, 1901, with the history that during the six days preceding her admission

she had complained of pain in the abdomen, with vomiting, and some fever and prostration. Her symptoms had been attributed to some digestive disturbance.

At the time of her admission her temperature was 103° F.; pulse, 128. The entire abdomen was distended, with absolute rigidity of the muscles, and on this account it was impossible to make out the original seat of the trouble. An incision was made in the region of the appendix, and as soon as the peritoneum was opened a large amount of milky pus exuded. The entire peritoneal cavity was apparently filled with this fluid. The appendix was in a gangrenous condition, with perforation, and there were no evidences that nature had made any effort to wall off the infected organ. A second incision was immediately made on the opposite side of the abdomen, and the entire peritoneal cavity was thoroughly irrigated with a large quantity of hot saline solution through a Chamberlain tube. During the course of the operation it became necessary to give the patient a hot intravenous saline infusion.

After completing the irrigation of the abdominal cavity, a large cigarette drain was inserted underneath the spleen, another under the liver, and a third in the pelvis, while the large wound on the right side was loosely packed with gauze. At the completion of the operation, the patient's pulse was 156, and very weak, necessitating free stimulation. During the subsequent four days, she was apparently constantly at the point of death, vomiting incessantly, and so weak that thirty-one stimulating rectal enemata were given. On the second day some of the packing was removed, and again on the fourth day. On the eleventh day, and again on the twenty-third day, the patient was given an anæsthetic and pockets of pus opened. Up to this time the patient's temperature ranged from 101° to 103° F., and her pulse was never under 120. On the thirtieth day her temperature dropped to normal; then it rose again, and did not become normal until the forty-first day; after this there were temporary elevations of temperature until the sixty-first day, when it became normal, and remained so.

Dr. Brewer said that in this case every portion of the greater peritoneal sac was distended with pus. It was one of the few cases he knew of where recovery had taken place after such an

extensive peritonitis. Nearly all the favorable cases have been in children.

DR. KAMMERER said that about two weeks ago he saw a woman of thirty with well-marked general peritonitis, the origin of which he failed to discover after laparotomy. The abdomen was opened in the middle line, the intestines were partially eviscerated and cleansed, and a tampon was introduced into Douglas's pouch, issuing from the lower angle of the wound. The patient recovered.

The speaker said that in his experience the treatment of general peritonitis by incision and irrigation has not been very brilliant; the cases are fortunately not as frequently met with now as they were some years ago in hospital practice. Out of many cases operated on by him, he has only been able to save four in which general peritonitis was really present. The speaker expressed the opinion that the diagnosis of general peritonitis is often made when that condition really does not exist. Unless the operator has convinced himself by inspection of the fact that the entire peritoneum is involved, the diagnosis of general peritonitis is not absolutely certain. This is more especially the case when we are dealing with the adhesive form of peritonitis.

Dr. Kammerer said that in the case he had referred to above, he had drained Douglas's pouch, although, when a general peritonitis exists, he had not much faith in the efficacy of drainage.

DR. ROBERT H. M. DAWBARN said that in one or two respects the case called for a little comment. According to the history, an anæsthetic was given on the second day after the operation, and again on the fourth day, for the purpose of removing a portion of the drainage. The speaker said his own experience in these cases has been such as to convince him that when once the Mikulicz or so-called cigarette drain has been put in place, it should remain for a good long while, and that its early removal while pus is discharging is really a mistake, as it opens fresh foci for infection. The fact that such drains have an objectionable smell after they have been in place for a few days is of minor importance. If the patient is apparently improving, with a falling temperature and pulse, Dr. Dawbarn said he would be guided by such factors rather than by the odor, and would let them stink and stay, perhaps a fortnight or longer.

The speaker asked Dr. Brewer whether, in his case, he em-

ployed the postural treatment advised by Dr. George R. Fowler, which is the reverse of that of Dr. Howard Kelly. Dr. Fowler has recorded some fifteen cases which he believes would have ended fatally from septic peritonitis if the patients had not been placed in the upright position, thus allowing the fluids to gravitate towards the pelvis. Dr. Dawbarn said that in two cases where he had resorted to this posture, the effects of it were apparently favorable and the patients recovered. The patient should be placed in an upright sitting posture just as soon as the condition of the heart permits it.

Dr. F. Tilden Brown said the cases which had recovered from a more or less general peritonitis coming under his observation had all been in children, with two exceptions, one a young woman of eighteen or nineteen, the other a man of twenty-four, who, after apparently complete convalescence, became despondent and took his life. There has recently been a tendency to do away with drainage in these cases, the view having been advanced that the peritoneum should be left to dispose of the septic material. In theory, that idea may be all right; but the speaker said he believed that at the time of operating, too thorough or too rapid a cleansing cannot be carried out, and that this should be followed by wick-drainage in all the dependent parts of the peritoneal cavity. Females are more apt to recover from this condition than males, owing to the fact that they so often get the benefit of vaginal drainage. As a rule, this is more effective than any other of the multiple lines of exhaust.

Dr. Brown said that in those apparently hopeless cases of advanced sepsis where, in addition to considerable general peritonitis, we have great distention and probably paresis of the bowel, the open stump of the appendix might possibly be utilized to advantage by cutaneous suture as a colostomy wound for the escape of gas or fæces, and for the insertion of a long tube into the ileum for washing out the lower bowel. The speaker said he had not had an opportunity of putting it into practice.

Dr. Dawbarn said that Dr. Robert F. Weir had already advised the expedient suggested by Dr. Brown, and had resorted to it in a few instances. In a case of chronic colitis, for example, where it is desired to maintain a fæcal fistula for a time, and to flush the ascending and transverse colon, the appendix is dissected free, cut across, and stitched to the skin. Then the catheter

is carried down through the hollow appendix, and thus this otherwise dangerous little reptile for once serves a useful purpose.

DR. KAMMERER said that in general peritonitis he advises washing out the peritoneal cavity with large quantities of hot salt solutions and then closing the wound.

DR. HOTCHKISS said he did not believe that the general peritoneal cavity could ever be effectively drained by gauze packing or any other method of artificial drainage. Personally, in these cases of advancing peritonitis he relied principally upon the physiological forces to effect drainage through the peritoneal lymphatics and blood-vessels, and upon the power of the leucocytes to deal with the remaining infection. He believed that most cases of true general septic peritonitis were necessarily fatal, anyway, and that in any case of generalizing and more or less extensive peritonitis the prognosis depended upon the degree and character of the infection, taking into consideration, of course, the resisting power of the patient, and upon the technique of the surgeon at the operation. In these cases he said it was his practice, having removed the infected appendix and cleansed the immediate neighborhood with peroxide, to wash out the pelvis repeatedly with hot normal salt solution, and, if the infection had extended beyond this, to wash out the general cavity as far as possible with a stream of salt solution, thrown in by a Chamberlain tube, introduced among the intestinal coils and without attempting to eviscerate. He thought that in this way the toxins were diluted and absorption was promoted along physiological channels. Evisceration in any case of this description seemed to him to increase the shock; and the necessary traumatism inflicted upon the intestines by handling; to lessen greatly the absorptive power of the peritoneum. This he thought had been well proven experimentally as well as clinically. As to drainage, he limited it to a small cigarette of gauze enveloped in wet rubber tissue and introduced to the old appendiceal site, and in some cases he introduced also a second and similar cigarette to the bottom of the pelvis. Both drains were removed generally at the end of twenty-four hours or sooner. Under this method of treatment he had had many cases of advancing peritonitis progress to a recovery, and he felt sure that in his experience, at least, more cases had been saved, and the period of convalescence made considerably shorter than was the case where extensive gauze packing had been employed by him.

He believed, also, that the introduction of large pieces of gauze between the intestinal coils was a fertile cause of intestinal obstruction, and a practice not easily to be defended in the light of recent experiment and experience.

DR. BREWER said he believed in the principle of the elevated thorax posture, which Dr. Dawbarn had referred to, and under certain conditions it might be very useful; but in the case which he had shown, the patient was so extremely weak that he had to be maintained in the recumbent position. Simply raising the head of the bed slightly would have done no good.

Dr. Brewer said that while he believed peritoneal sepsis was the cause of death in these cases, and that drainage was perhaps of little avail, he had never dared to omit it. It is reasonable to suppose that, by relieving the abdominal cavity of large collections of pus by drainage, we lessen the danger of general sepsis. By putting in cigarette drains, we at least remove a fraction of the pus, and to that extent relieve the sepsis.

SARCOMA OF THE PTERYGOMAXILLARY FOSSA.

DR. BREWER presented a boy, who came to the hospital about a year ago, complaining of pain in the left side of his face, and inability to open the jaw. The left side of the face was much swollen, and the mass, externally, was rather hard and immovable. Inspection showed that the mass also invaded the mouth, but here it was apparently composed of a soft, gelatinous material covered with mucous membrane. The internal portion of the mass was lobulated, and apparently extended as far as the edge of the external swelling.

The patient was examined by a number of men, and the decision was finally reached that the mass was probably a sarcoma which had partially undergone myxomatous degeneration. Upon incising the internal swelling, it was found that it was not a myxoma, but was composed of the ordinary cushion of buccal fat which had been pushed forward by the external growth. The latter was a hard, dense, white, encapsulated tumor, extending underneath the zygoma and into the temporal fossa and the temporomaxillary space. It was about the size of a small orange, and was very hard and lobulated. After removal of this mass, the wound was closed with silk. The boy made an uneventful recovery, and has been in perfect health since.

The pathologist reported that the growth was a fibrosarcoma, not particularly malignant.

DR. DAWBARN said that, as the growth in this case was encapsulated and not of a very malignant variety, it was possible that there would be no recurrence; but the speaker thought that the patient's prospects of freedom from recurrence would be distinctly better if extirpation of the external carotids had been done in addition to removing the growth. The value of this procedure has passed the experimental stage, even in the most malignant types of subperiosteal sarcoma of the lower jaw, and it does not seem to add much to the severity of the operation. If, however, carotid extirpation was not to be done, at least the speaker strongly believed that a simple double ligation of the external carotids, which can easily be done in five minutes for each side, and with practically no risk, would very soon come to be regarded as an advisable regular preliminary to any and every operation which, such as this of Dr. Brewer, promised otherwise to be very bloody; thereby, by preventing loss of blood, almost all risk of shock would disappear.

HYDATIDS OF THE KIDNEY.

DR. IRVING S. HAYNES read a paper with this title.

DR. BREWER mentioned a case of probable hyatid cyst of the kidney that had come under his observation. The patient was sent to the hospital with the diagnosis of empyema, and a needle introduced between the seventh and eighth ribs on the left side brought pus. Inspection showed an enormous intra-abdominal growth on the left side. An incision was made in the loin, and about a gallon and one-half of pus evacuated. The cyst refilled, and at a subsequent operation it was removed, together with the kidney, with which it was evidently connected. Upon its removal, the kidney and emptied cyst were passed around among the spectators at the operation, and in some manner the specimens disappeared, so that no pathological examination could be made.